

HD 211.M3 C75 1985 c2
Program

Maryland Coastal Zone Management

CRITICAL AREAS INTERIM REVIEW PROCEDURE
Baltimore County

COASTAL ZONE
INFORMATION CENTER

HD
211
.M3
C75
1985
c.2

Introduction

On June 1, 1984, one of Maryland's most controversial and far-reaching land use bills was signed into law by Governor Hughes. This law, entitled the Chesapeake Bay Critical Areas Commission Act, was the cornerstone of the State's legislative package aimed at finally cleaning up the Bay. Among other things, the law designated as critical a 1000-foot ribbon of land around the Bay and its tidal tributaries and wetlands. The law also established a special commission to administer the law and to develop criteria for the protection of the Bay's water quality and plant and wildlife habitats. Affected local jurisdictions are required to use these criteria to develop their own land use plans for the critical areas that fall within their borders.

However, these plans will not be in effect for at least three to four years and, until then, local jurisdictions must abide by the interim requirements set forth in Section 8-1813 of the law.

Section 8-1813, commonly referred to as the "findings" section, defines the approval conditions for development in the critical areas until local programs are implemented. The section requires that in order for any subdivision plat, variance, special exception, conditional use permit, or zoning amendment in the critical areas to be approved, it must be specifically

found that:

(1) The proposed development will minimize adverse impacts on water quality that result from pollutants that are discharged from structures or conveyances or that have run off from surrounding lands; and

(2) The applicant has identified fish, wildlife, and plant habitat which may be adversely affected by the proposed development and has designed the development so as to protect those identified habitats whose loss would substantially diminish the continued ability of populations of affected species to sustain themselves.

Local jurisdictions were required to begin implementing this section from the moment it was signed. At that time, no guidelines or interpretations of the language had been issued by the state agencies involved with the legislation. No grace period for organization was allowed and this placed a great burden on counties that had significant development projects which required a "finding" in order to be approved.

Such was the case for Baltimore County. We had four large subdivisions subject to the law and so, in this context of immediacy, we developed a procedure for their interim critical areas review as required by Section 8-1813.

Development of the Interim Review Procedure

In Baltimore County, plans for subdivisions must be reviewed by the Office of Planning and Zoning, the Department of Public Works, and the Department of Health. Collectively, these reviewing agencies are called the County Review Group (CRG) and for Critical Areas reviews, the Office of Planning and Zoning is the lead agency.

On the day after the Critical Areas Commission law was signed, the CRG and other county agencies that would be affected by Section 8-1813 met to discuss reviewing responsibilities and the additional information that applicants would be required to submit. This initial information list, the agencies responsible for evaluating the information items, and indications of whether the requirements were new or already existing appear in Appendix A of the supplementary material section.

A far more detailed and comprehensive Critical Areas informational checklist has been developed and can be found in Appendix B. This is the core of our subdivision review and the information gathered forms the basis of our findings. Pages 1-3 of this checklist address the existing environmental conditions on the site and Pages 4-5 pertain to the development's design and the impacts it may have on the environment. The checklist also lists the specific information required, sources of that information, and the submittal form required.

Interim Subdivision Review Procedure

When an applicant first files for subdivision approval, the site is located on the state Critical Areas map. If it is within the Critical Areas, he is informed of the law in general and the requirements of Section 8-1813.

If the subdivision is of five or more units, the applicant must provide the information outlined on the Critical Areas Information Checklist. The staff of the Office of Planning and Zoning gathers all the information for subdivisions of less than five units. This is done so that an undue burden is not placed on the very small developer whose development may not have a significant individual impact on the environment.

If the development is planned to be five or more units, the applicant must supply all the environmental information prior to any discussion of the plan. The Office of Planning and Zoning staff discusses these requirements with the applicant to give him a complete understanding of the scope of detail that is expected and to highlight areas of particular concern. The applicant is encouraged to contact the office throughout the process if any difficulties are encountered. The result of this initial work is an existing environmental conditions report with accompanying map(s). Copies of this are sent to the three agencies in the County Review Group for their evaluation. The review is coordinated by the Office of Planning and Zoning. The submitted report is reviewed for content and, if information is lacking or

less than 5 units
the County does not
assist

if the level of detail is insufficient, the applicant is so informed. The review stops until the deficiencies are addressed by the applicant to the satisfaction of the CRG. When the report meets our standards, the information is critically evaluated. All sites are field-checked to verify the reports. The applicant then meets with the Office of Planning and Zoning staff to discuss the environmental constraints of the particular site. Development alternatives are discussed and guidance offered.

After this, the applicant may then proceed with the design of the development, hopefully bearing in mind the environmental points discussed. Throughout the design phase, the applicant is again encouraged to discuss particular points and alternatives with the staff. Once the design work is completed, a second Critical Areas report with map is required, this time discussing the impacts of the design on the environment and any mitigative measures used.

This information is again reviewed for content and level of detail. If all is satisfactory, the entire plan is evaluated for its effects on water quality and plant and wildlife habitats. Based on this evaluation, a finding of whether the project meets the requirements of Section 8-1813 is rendered by the Director of the Office of Planning and Zoning. Copies of the finding and support material are forwarded to the Department of State Planning for their

Site visits

Pre design review

optional during design review

Final review and findings

review.

The Finding Rationale

The final review focuses on the impacts that the development will have on the receiving water's quality and the plant and wildlife habitats. The State has furnished almost no guidelines on criteria for making a finding and this has presented a variety of interpretation difficulties for the reviewing jurisdictions. Baltimore County has begun its own interpretations of the section and our perspective for making a finding is followingly discussed.

For water quality, it would be desirable to develop standards on the maximum percent increases in pollutant loadings that would be allowable. However, this is as of yet impossible because comprehensive data and target levels are lacking or are unavailable in a usable form. Until quantitative standards are developed, Baltimore County is taking a qualitative approach of protecting habitats in order to protect water quality.

water

As was alluded to previously, there is no authoritative interpretation of Subsectin 8-1813 (b) that deals with protecting plant and wildlife habitats. Until we receive guidance to the contrary, Baltimore County focuses on preserving habitats that are significant in the County's coastal zone. Significant implies:

habitats

- (1) habitats that are uncommon to rare in

Baltimore County's coastal zone;

- (2) habitats that serve to support or that are capable of serving to support coastally-related wildlife and fish species. This includes habitats that such species may use for breeding, feeding, resting, migrational, cover, or resting purposes;
- (3) habitats that serve a water quality function, especially as they relate to aquatic species.

Based on these perspectives, the habitats that we seek to protect are wetlands; forests, especially those adjacent to water; submerged aquatic vegetation; old fields; and any unique habitats that may be found on a site.

We also focus on the cumulative impacts of development. We have tried to adopt an "ecosystem" approach, believing that individual projects cannot be separated from the ^{combined} effects they may have on the Bay as a whole.

Baltimore County has not issued any absolute standards for making a finding. It is our contention that the environment is variable and that different projects will have different impacts on the Chesapeake Bay ecosystem. There are a variety of solutions that could minimize impacts and it is up to the applicant, not the County, to develop them. Some of the impact minimization methods that we have used include the cre-

ation of wetlands, stormwater management by infiltration, reduction of impervious surfaces, prohibition of development on wetlands, the use fertilizer and pesticide application agreements, clustering, and the use of setbacks. In the absence of any substantive mitigation methods proposed by an applicant, the County has found that setbacks from wetlands and the water's edge to be one of the most effective and easily administered methods for minimizing impacts to both water quality and plant and wildlife habitats. We have chosen a 300-foot setback as a guide. This distance is dependent upon a number of factors such as the environmental characteristics of the site, the intensity of development, and the mitigation methods proposed.

300
foot
setback

To determine the setback distance, we first researched the scientific literature, but found little that would apply to our County or our goals. We then investigated the setbacks used in other jurisdictions across the country and found numbers that ranged from zero to 300 feet. The 300-foot setback was adopted by the New Jersey Pinelands Commission in order to protect wetlands and preserve water quality. This number was the result of a consensus of opinion of a number of experts gathered by the Commission to determine an effective setback. A number of Maryland environmental experts were contacted for their opinion about this number and the majority felt it was reasonable.

As was previously stated, the 300-foot setback is a guide and the County will examine any of the minimization alternatives a developer proposes. Depending upon the characteristics of the site and development, a combination of alternatives may fulfill the law's requirements. For example, the use of retention ponds, wetlands creation or rehabilitation, and reforestation may result in varying buffer widths. As can be seen, the reviews are very site specific, which allows for flexibility, but which also greatly increases the review time. Until the State issues any new criteria or guidance, Baltimore County will continue to review critical area projects in this manner.

APPENDIX A

Issue	Information Requested	Evaluating Agency	Subdivisions	Zoning Amendments	Variances	Special Exceptions
Critical Area	Critical Areas boundary must be designated on map.	Planning & Zoning	New	New	New	New
Water Quality		Health Department	Existing (in part)	New	New	New
Submerged Aquatic Vegetation	SAVs must be designated on map and briefly described.	OPZ	New	New	New	New
Water Depth	Average water depths within 50 ft. of the shoreline must be designated on map.	OPZ	New	New	New	New
Shoreline	Shoreline erosion control structures or projects must be designated on map. Rate of shoreline erosion must be supplied.	OPZ	New	New	New	New
Wetlands/Hydric Soils	State wetlands and County hydric soils must be designated on map.	Health Dept.	Existing	New	New	New
Topography	Existing topography based on updated aerials of a scale of 1" = 100' with 2' intervals or field run data must be designated on map.	Public Works	Existing (in part)	Existing	New	New
Impervious Surfaces	Percent impervious surface of development must be calculated.	Public Works	Existing	New	New	New

Issue	Information Requested	Evaluating Agency	Subdivisions	Zoning Amendments	Variances	Special Exceptions
Steep Slopes	Slopes greater than 25% must be designated on map.	Planning and Zoning	Existing	Existing	New	New
Points of Discharge	Points of discharge from structure or conveyances must be located on map.	Public Works	Existing (in part)	New	New	New
Plant Habitats	Plant habitats must be designated on map and described. Description shall include habitat type, species associations, characteristics, vegetation strata and value to fish and wildlife. The amount of habitat to be altered by development must be calculated.	OPZ and Health Dept.	New	New	New	New
Fish & Wildlife Habitat	Fish & wildlife habitats (including important breeding and nesting areas) must be shown on map and described in terms of species composition, diversity, regional & local importance, etc.	OPZ	New	New	New	New
Streams/Water	Streams (intermittent & perennial) spring heads, seeps, and all water bodies must be designated on map.	Health Dept.	Existing	Existing	New	New
Floodplains	Limits of 100 yr. riverine & tidal floodplains must be designated on map.	Public Works	Existing	Existing	New	New

APPENDIX B



BALTIMORE COUNTY
OFFICE OF PLANNING AND ZONING
TOWSON, MARYLAND 21204
494-3211

NORMAN E. GERBER
DIRECTOR

October 29, 1984

TO: ALL INTERESTED PARTIES

FROM: EUGENE A. BOBER, Chief
Current Planning & Development Division, OPZ

RE: Interim Critical Areas Requirements for Baltimore County

On June 1, 1984, Governor Hughes signed into law the Chesapeake Bay Critical Areas Commission Bill. Among other things, this law designates a "critical area" of concern around the Bay which essentially is 1,000 feet from the landward edge of State wetlands or the shoreline of the Chesapeake Bay and its tidal tributaries. A special administrative commission was established with one of its principal purposes being the development of criteria for the protection of the water quality and plant and wildlife habitats of the Chesapeake Bay. Counties are to use these criteria to develop and implement programs to guide coastal land use in an environmentally sensitive manner. These programs will not be in effect for at least three to four years and, until then, the County must abide by the interim regulations set forth in Section 1813 of the law. The relevant portions of this section are quoted below.

From June 1, 1984 with regard to any subdivision plat approval or approval of a zoning amendment, variance, special exception, conditional use permit or use of a floating zone, affecting any land or water area located within the initial planning area identified in Section 8-1807(A) of this subtitle, for which application is completed after that date, the approving authority of the local jurisdiction in rendering its decision to approve an application shall make specific findings that:

(1) The proposed development will minimize adverse impacts on water quality that result from pollutants that are discharged from structures or conveyances or that have run off from surrounding lands; and

(2) The applicant has identified fish, wildlife, and plant habitat which may be adversely affected by the proposed development and has designed the development so as to protect those identified habitats whose loss would substantially diminish the continued ability of populations of affected species to sustain themselves.

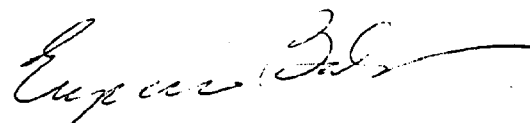
October 29, 1984

TO: ALL INTERESTED PARTIES

In order for the County to comply with this section, it will be necessary for developers to provide additional environmental information. These informational requirements are outlined in checklist form on the attached table entitled 'Critical Areas Information Requirements for Baltimore County.' Please note that the items on pages 1 to 3 pertain to baseline environmental data. The items on pages 4 and 5 pertain to the development's design and the impacts it may have on the environment.

During the initial project planning phase, developers are invited to contact Eugene Bober at 494-3335 to begin informal discussions about the site. Prior to any formal review, the baseline environmental information must be submitted. With this information, the Planning staff can then more fully discuss the environmental characteristics of the site and offer guidance about the development plan. During the design phase, the developer is encouraged to discuss major design points as they relate to the environment. A final review of the project will be made following the submission of the remaining information requirements that refer to the development itself.

Should you have any questions or comments about this process, please contact Eugene Bober at 494-3335.



EUGENE A. BOBER, Chief
Current Planning & Development Div.

BALTIMORE COUNTY

<u>SUBJECT</u>	<u>SPECIFIC INFORMATION</u>	<u>SOURCE</u>	<u>SUBMITTAL FORM</u>
CRITICAL AREA	Critical Areas Boundary	Map in Office of Planning and Zoning, Current Planning & Development Div.	Critical Areas Information Map*
WATER DEPTH	Average water depth within 50' of shoreline at mean high tide to be shown at 1' intervals. This is to be done for water bodies on and adjacent to the site as well as for the major tributaries into which the site drains.	Nautical Maps	Critical Areas Information Map. If data are unavailable, field estimates and descriptions may be substituted.
SHORELINE	1. Shoreline rates of erosion or accretion 2. Shoreline erosion control structures or projects	<u>Historical Shorelines and Erosion Rates, Maryland Geological Survey, 1975</u> <u>Shoreline Structures in Maryland: Their Location and Extent, Maryland Geological Survey, 1976</u> or latest available information	Critical Areas Information Text** Critical Areas Information Map

*Critical Areas Information Map is a map of the site detailing the requested environmental information. Lot lines, roads, utility lines, etc. should not be included and the scale and size must be the same as that used for the site development plan.

**Critical Areas Information Text is a written report, describing the requested environmental information.

<u>SUBJECT</u>	<u>SPECIFIC INFORMATION</u>	<u>SOURCE</u>	<u>SUBMITTAL FORM</u>
SOILS	<p>1. Wetland Soils</p> <p>2. Description of site's soil erodibility and permeability characteristics</p> <p>3. Drainage patterns</p>	<p>Baltimore Co. Wetland Guidelines, Baltimore Co. Soil Survey</p> <p>Baltimore Co. Soil Survey or best available information</p>	<p>Site Plan</p> <p>Site Plan or Critical Areas Information Map or Text</p>
TOPOGRAPHY	<p>1. Existing topography</p> <p>2. Slopes greater than 15% and 25%</p>	<p>Updated aerials of a scale of 1"=100' with 2' intervals or field run data</p> <p>" "</p>	<p>Site Plan or Critical Areas Information Map</p> <p>Crosshatched on Site Plan or Critical Areas Information Map</p>
STREAMS/WATER	Streams (intermittent and perennial), springheads, seeps, and all water bodies	Baltimore Co. Soil Survey, field inspections, or best available data	Site Plan or Critical Areas Information Map
FLOODPLAINS	Limits of 100-year riverine and tidal floodplains	Inquiries may be made at Dept. of Public Works.	Site Plan or Critical Areas Information Map
UNIQUE FEATURES	Location and description of unique characteristics or features	Field inspection	Critical Areas Information Map or Text

SUBMITTAL FORM

SOURCE

Critical Areas Information
Map or map of smaller scale
only for SAVs in vicinity
of site.

Critical Areas Information

Critical Areas Text

Critical Areas Text and Map

SPECIFIC INFORMATION

SUBJECT

PLANT HABITATS 1. Mapping of submerged aquatic vegetation (SAV) and description in terms of species composition and extent. This is to be done for SAV beds on and/or adjacent to the site as well as for beds in the vicinity into which the site drains.

2. Mapping of different vegetative habitats (ex., tidal and nontidal wetlands, woodlands, old fields, pastures, cultivated fields, etc.) and description in terms of plant communities and associations; diversity; presence of locally or regionally rare or endangered species; presence of significant coastal species; vegetation layers (overstory, mid-story, understory, herbaceous layer); successional stage, unique vegetation; etc.

3 Approximate acreage of each habitat type

Field inspection

WILDLIFE AND FISH HABITAT

Description of wildlife and fish habitats in relationship to the plant habitats and in terms of the availability and suitability of food and cover; continuity of habitats to determine corridor effects; presence (actual or potential) of coastal/Bay species; presence of locally or regionally rare, endangered, or threatened species; quality of nesting, breeding, or nursery sites; migrational stopovers, etc.

**Field inspection and
attached references**

NOTE: "Fish and wildlife" is defined to include finfish, crustaceans, mollusks, birds, mammals, amphibians, and reptiles

<u>SUBJECT</u>	<u>SPECIFIC INFORMATION</u>	<u>SOURCE</u>	<u>SUBMITTAL FORM</u>
IMPERVIOUS SURFACES	Calculations of percent impervious surface before and after development. Calculations should be based only on developable land.		Critical Areas Information Text
POINTS OF DISCHARGE for stormwater management, sewage, agricultural practices, sediment control, industry, etc.	Points of discharge from structures or conveyances which include, but are not limited to, swales, storm drains, pipes, etc.	Field inspections, permits	Critical Areas Information Map
WATER QUALITY	Description of the extent and types of pollutants likely to occur due to the proposed development. A detailed analysis of the impacts that the pollutant loadings will have on water quality and habitats. This information is to be provided for the construction phase and after development is completed. Description of the effects that the velocity and volume of stormwater will have on water quality and habitats.	<u>Guidebook for Screening Urban Nonpoint Pollution Management Strategies</u>	Critical Areas Information Text
STORMWATER	Calculations of stormwater volumes and rates before and after development. Detailed discussion of stormwater management alternatives, including infiltration, retention, and extended detention. Detailed justification for the rejection of infiltration or retention alternatives, if applicable.	Dept. of Public Works Guidelines	Critical Areas Information Text

SUBJECT

SPECIFIC INFORMATION

SOURCE

SUBMITTAL FORM

5

MITIGATIVE
MEASURES

A detailed comprehensive summary of the measures the applicant will take to minimize runoff, soil erosion, sedimentation, people pressure, etc. This is to include (1) a discussion of stormwater management alternatives including each alternative's potential impacts on water quality and/or plant habitats, especially wetlands; (2) a discussion of the sediment control practices to be implemented including the additional measures the applicant will be taking to protect water quality and critical habitats; (3) a discussion of environmental protection design measures such as buffers, reduction of vegetation removal, covenants regarding pesticide and fertilizer applications, reduction of impervious surfaces, etc.

PLANT HABITATS Approximate percentage of each habitat type that will be lost due to development.

Additional information may be required depending upon the site and/or project characteristics.

Critical Areas Information Text

References
for Plant, Wildlife, and Fish Habitat

- * BUCK, LEWIS. 1974. Wetlands, bogs, marshes, and swamps.
- * COLE, GERALD A. 1983. Textbook of limnology. Toronto: C.V. Mosby Company.
- CONQUIST, ARTHUR and H. A. GLEASON. 1963. Manual of vascular plants of northeastern United States and adjacent Canada. New York: D. Van Nostrand.
- * DAUBENMIRE, REXFORD F. 1968. Plant Communities. New York: Harpers.
- FASSETT, NORMAN C. 1975. A manual of aquatic plants. Madison, Wisc: University of Wisconsin Press.
- FERNALD, M. L. 1950. Gray's manual of botany 8th ed. New York: American Book Co.
- * GLEASON, HENRY A, 1952. Illustrated flora of northeastern United States and adjacent Canada. New York: Dover Publications, Inc.
- * HARLOW, WILLIAM. 1964. Fruit key and twig key to trees and shrubs. New York: Dover Publications, Inc.
- HOTCHKISS, N. 1972. Common marsh, underwater, and floating-leaved plants of the United States and Canada. New York: Dover Publications.
- * KLOTS, ELSIE B. 1966. Freshwater life. New York: G. P. Putnam's Sons.
- * MARTIN, A.C., H.S. ZIM and A.L. NELSON. 1955. American wildlife and plants. A guide to wildlife food habits. New York: Dover Publications, Inc.
- * MC CORMICK, J.A. and H. SOMES, JR. 1982. The coastal wetlands of Maryland. Annapolis, MD: Maryland Department of Natural Resources, Coastal Zone Management Program.
- * NEWCOMB, L. 1977. Newcomb's wildflower guide. Boston: Little, Brown and Co.
- * ODUM, EUGENE. 1963. Ecology.
- * _____. 1971. Fundamentals of ecology.
- * PETERSON, R.T. and M. McKENNY. 1968. A field guide to wildflowers of northeastern and north-central North America. Boston: Houghton Mifflin Co.
- * PETRIDES, G.A. 1972. A field guide to trees and shrubs. Boston: Houghton Mifflin Co.
- PIERCE, ROBERT J. 1977. Wetland plants of the eastern United States. New York: Army Corps of Engineers.

- * PRESTON, R.J., Jr. 1961. North American trees. Cambridge Press: The M.I.T. Press.
- * RAMWELL, D.S. 1972. Ecology of salt marshes and sand dunes.
- * REID, GEORGE K. 1976. Ecology of inland waters and estuaries, 2nd Edition. London: Chapman and Hall.
- SILBERHORN, G.M. 1976. Tidal wetland plants of Virginia. Virginia Inst. of Mar. Sci. Ed. Series No. 19.
- * _____. 1982. Common plants of the mid-Atlantic Coast.
- * SMITH, ROBERT LEO. 1980. Ecology and field biology.
- * WATTS, MARY T. 1975. Reading the landscape of America. New York: MacMillan Publishing Co.

*Available in Baltimore County Library, Towson.

NOAA COASTAL SERVICES CENTER LIBRARY



3 6668 14103 2732